

What is claimed is:

Claim 1. A cup-like broth container having a generally hexagonal cross section, an open top surface, and a closed bottom surface, the container comprising four mutually opposed pairs of connected sidewalls with a protruding rib formed on each of four
5 perpendicularly opposed single sidewalls.

Claim 2. The broth container of claim 1 further comprising four Y-shaped clamping ridges, each ridge having one leg portion and two extending arm portions, wherein each leg of the Y-shaped clamping ridge is attached to and extends outwardly from a single one of the four sidewalls located between the four sidewalls having a protruding rib.

10 Claim 3. The broth container of claim 1 wherein the protruding ribs formed on each of four sidewalls fully extend from the top surface to the bottom surface of the broth container.

Claim 4. The broth container of claim 2 wherein the Y-shaped clamping ridges extend about 50% to 80% of the length of sidewalls from the top surface towards the
15 bottom

Claim 5. The broth container of claim 1 wherein the protruding ribs protrude about 1/8th inch outwards from the sidewalls.

Claim 6. The broth container of claim 2 wherein the Y-shaped clamping ridges protrude about 1/8th inch outwards from the sidewalls.

20 Claim 7. The broth container of claim 2 wherein the arm-portions and leg-portions of the clamping ridges provide a vertically oriented recessed surface adapted to mate with a clamping members of a robotic handling apparatus.

Claim 8. The broth container of claim 1 further comprising a freely disposed, ferromagnetic or semi-ferromagnetic mixing member that may be caused to revolve
25 within the broth container by a vortex mixer.

Claim 9. The broth container of claim 1 further comprising a foil membrane adhered over the top surface.

Claim 10. The broth container of claim 1 wherein the top surface is generally rectangular in shape except for two pairs of indent notches formed at opposing corners of

the top surface, the indent notches being sized and shaped to mate with correspondingly sized and shaped furrows formed in a broth canister so that a number of broth containers may be confined in a broth canister in a common and stable orientation.

- 5 Claim 11. The broth container of claim 10 wherein the ribs are vertically aligned over one another by indent notches so that a number of broth containers may be stacked atop one another in a broth canister without collapsing the foil membrane that is adhered over the top surface.

- 10 Claim 12. A closed elongate broth canister for housing the container of claim 1, the canister having a generally rectangular cross-section formed by a front wall, a back wall and two side walls, the front wall, back wall and side walls of essentially similar dimensions so that a squarely shaped interior is formed to house a plurality of broth containers stacked one atop another within the broth canister.

Claim 13. The broth canister of claim 12 having a closed top end portion and a closed bottom end portion.

- 15 Claim 14. The broth canister of claim 12 further comprising a number of internal ribs extending along the interior height of side walls to secure broth containers within broth canister.

- 20 Claim 15. The broth canister of claim 12 further comprising a broth canister mounting flange shaped to seat into a mounting groove within an environmentally controlled chamber so that a broth canister may be placed in a vertical position whereat two spring-loaded latching cams snap over a pair of latch steps formed at opposing ends of a latching flange extending upwardly above the top end portion of the canister.

- 25 Claim 16. The broth canister of claim 15 further comprising a broth eject port formed in the front wall proximate the mounting flange and sized to allow the lowermost broth container within a plurality of broth containers stacked one atop another to be removed from broth canister.

Claim 17. The broth canister of claim 16 wherein the broth eject port has the shape of a rectangular opening formed between a pair of depressions having a flat portion between the depressions, the flat portion providing a horizontal broth container

Claim 18. The broth canister of claim 15 further comprising a tongue flap
projection formed in the front wall and extending downwardly and partially into the eject
5 port to prevent broth containers from being dislodged accidentally from the canister and
also to prevent broth containers from being improperly inserted back into the canister.